Vale District Bureau of Land Management Middle Rim Gap Fence Harper Allotment (00301) Environmental Assessment EA No. OR-030-03-025

Finding of No Significant Impact

The Malheur Resource Area of the Bureau of Land Management, Vale District has analyzed a proposal to construct 0.4 miles of permanent fence between rim gaps separating Rufino Butte Pasture of Harper Allotment and Lake Ridge Pasture of Red Hills Allotment. The analysis included a no action alternative. Based on the following summary of consequences and as discussed in the environmental assessment, I have determined that implementation of the proposed action will continue to meet resource management objectives defined in the Southeastern Oregon Resource management Plan and Record of Decision which constitute the land use plan for Malheur Resource Area. Impacts to riparian vegetation communities adjacent to Cottonwood Creek, and thus riparian function, would be reduced with improvement of the barrier to livestock movement between pastures and thus unscheduled cattle presence on riparian communities during a period other than scheduled.

Impacts to critical elements of the human environment, including ten points of potential significance identified in 40 CFR 1508.27(b), are not determined to be in excess of limits requiring the development of an environmental impact statement. Negative impacts to desired perennial vegetation communities and thus watershed stability are not anticipated to increase with the proposed action. Additionally, improved implementation of the rim barrier to livestock movement will better insure that planned riparian community recovery will occur as identified in NEPA analysis utilized to implement the 1994 Harper Allotment Cooperative Agreement (EA OR-030-92-27).

As a result, on the basis of the information contained in this environmental assessment and all other information available, it is my determination that the proposed action does not constitute a major federal action significantly affecting the quality of the human environment and that an environmental impact statement is not required.

/s/ Thomas Hilken (for)	12-01-2003
Tom Dabbs	Date
Field Manager	
Malheur Resource Area	

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1 Purpose of and Need for Action

Four livestock operators are authorized by grazing permit and annual authorizations to graze livestock within Harper Allotment (00301). Three of those operators graze cattle and are dependent on fences and other barriers to livestock movement to define pasture boundaries and implement sound grazing schedules designed to meet resource management objectives. The fourth livestock operator grazes sheep and is dependent on herders to move sheep in a manner which meets resource management objectives.

Pasture boundaries within Harper and Red Hills allotments were defined within the 1994 Cooperative Agreement which divided Harper and Red Hills allotments, as well as identifying grazing schedules. The established barrier to movement of cattle between Rufino Butte Pasture of Harper Allotment and Lake Ridge Pasture of Red Hills is a combination of fences and rims on the east side of Cottonwood Creek. Recently, cattle scheduled to use Rufino Butte Pasture have established a trail through the rims in the vicinity of Little Cottonwood Creek to gain access to Cottonwood Creek riparian communities in Lake Ridge Pasture, resulting in unauthorized use of Lake Ridge during a season not conducive to riparian recover or maintenance (figure 1). Livestock operators have requested authorization to construct permanent fencing to close access to the newly established trail and restore the barrier to cattle movement between Rufino Butte and Lake Ridge pastures.

Possible decisions to be made as a result of information provided in this environmental assessment include the types of actions, if any, which would be considered and implemented to restore the barrier to cattle movement between Rufino Butte and Lake Ridge pastures. No other federal, state or local government is involved in the NEPA analysis of the proposed actions, beyond issue identification, review, and comment on content of the draft document.

Internal scoping of issues relevant to the proposed action identified the need to ensure livestock management actions implemented did not impair meeting riparian, upland vegetation, watershed, special status species, and cultural resource management objectives presented in the land use plan. The level of controversy of livestock management actions implemented in Harper and Red Hills allotments is moderate with one national environmental organization requesting to be informed of proposed changes. Since the newly established livestock trail is within an area managed with guidance provided by the interim management policy for lands under wilderness review, all individuals and organized which have identified an interest in being notified of proposals for actions within wilderness study areas of Vale District will be notified. Additionally, the Oregon Department of Fish and Wildlife is typically informed of proposed livestock management changes as is the Malheur County Court. Memoranda of Understanding between BLM and a number of Tribes (the Burns Paiute Tribe and the Confederated Tribes of the Umatilla Reservation) are in place to define coordination.

The proposed actions implemented to ensure a barrier to cattle movement would be implemented cooperatively between BLM and livestock operators with necessary revisions to the cooperative agreements for the maintenance of rangeland projects (form 4120-6).

2 Alternatives Including the Proposed Action

This section describes the proposed action and the no action alternative. Alternatives to limit grazing use in Rufino Butte to spring only or to exclude livestock use in Rufino Butte to eliminate one source of midseason unauthorized cattle use in Cottonwood Creek were considered but not analyzed as described in section.2.3.

2.1 Proposed Action

The proposed action is to construct approximately 0.4 miles of permanent fence within sections 23 and 26, T. 22S., R40E., W.M. (figure 1). The proposed fence would be four strand with barbed wire on the top three and smooth wire on the bottom to allow pronghorn passage. The fence would be no higher than 42

inches to allow deer passage. Both the north and south ends of the proposed fence would connect to rim or rock slopes to deter cattle passage between Rufino Butte and Lake Ridge pastures. Since the proposed fence is within Cottonwood Creek Wilderness Study Area, all materials and equipment needed for construction would be transported by helicopter or by pack horse. Vehicular access would be limited to recognized roads and ways. Materials used and specific project location would be selected with consideration to minimize visual impacts.

2.2 No Action Alternative

The existing barriers to livestock movement between Rufino Butte and Lake Ridge pastures would be maintained. Livestock operators would be required to increase the frequency of periodic riding to ensure compliance with the grazing schedules established within the 1994 Harper Allotment Cooperative Agreement and terms and conditions of grazing authorizations.

2.3 Alternatives Considered Although not Analyzed

The Bureau did not develop additional alternatives beyond the proposed action and the no action alternatives. Alternatives to limit grazing use in Rufino Butte Pasture to spring only or to exclude livestock use in these pastures to protect riparian communities adjacent to Cottonwood Creek were considered but not analyzed. The cooperative agreement grazing rotations which implements mid to late summer use of Rufino Butte Pastures was implemented in 1995. This planned schedule considered all known resource values in Harper and Red Hills allotments. Disruption of this schedule to meet localized riparian needs would complicate analysis, including many more uncertain impacts. Additionally, it could cause similar riparian impact problems with possible proposed changes to mid-summer use of other pastures. Thus available alternatives were limited to authorizing the request to construct additional fence to enforce the existing barrier to livestock movement with appropriate mitigation actions or maintaining the existing situation with cattle access to Cottonwood Creek, requiring additional livestock management activity by operators and compliance checks by BLM.

Excluding livestock grazing from Harper Allotment could also be considered although a no grazing alternative and an alternative with a significant reduction in grazing were analyzed in the Southeastern Oregon Resource Management Plan EIS and not selected for the record of decision. As a result, those alternatives will not be analyzed further.

3 Affected Environment

This section presents information on relevant resource components of the existing environment, that is, the baseline environment.

3.1 Vegetation, Soils and Watershed

Vegetation in Harper and Red Hills allotments consists of shrub steppe plant communities dominated by sagebrush species and bunchgrasses. The vegetation type which covers the majority of the allotments is dominated by Wyoming big sagebrush (*Artemisia tridentata ssp wyomingensis*) with an understory of perennial grass species, primarily bluebunch wheatgrass (*Pseudorogneria spicata*), Sandberg bluegrass (*Poa secunda*), Thurber's needlegrass (*Stipa thurberiana*), basin wildrye (*Leymus cinereus*) and localized areas of cheatgrass (*Bromus tectorum*). Depleted rangelands within Squaw Creek Seeding Pasture of Red Hills Allotment, approximately five miles downstream from the proposed fence, was seeded to adapted nonnative species, primarily crested wheatgrass (*Agropyron cristatum*) and now has varying levels of sagebrush reestablishment. Microbiotic crusts composed of cyanobacteria, green algae, lichens, mosses, microfungi, and other bacteria occupy many open spaces between higher plants and provide benefits as identified in a 2001 BLM technical reference, "Biological Soil Crusts: Ecology and Management".

The soil found in the area near the recognized boundary between Rufino Butte and Lake Ridge pastures was surveyed and described in Oregon's Long Range Requirements for Water 1969, Appendix I-10, Malheur Drainage Basin. Unit 76 soil occurs on moderately steep slopes ranging from 12 to 20 percent.

Unit 76 soils are shallow, clayey, very stony, well drained soils over basalt, rhyolite, or welded tuff. These soils occur on gently undulating to rolling lava plateaus and some very steep faulted and dissected terrain. Native vegetation consists mostly of big sagebrush, low sagebrush, bluebunch wheatgrass, and Sandberg bluegrass.

Watersheds within Harper and Red Hills allotments, adjacent to the proposed fence location, drain to Cottonwood Creek and north to Malheur River in the Lower Malheur River subbasin (17050117). Malheur River flows east into the Snake River and subsequently to the Columbia River.

3.2 Special Status Plants

No plant species listed or proposed for listing under the Endangered Species Act of 1973 are known to be present within the vicinity of the proposed fence location. Habitats known to support special status plant species near the proposed fence include a number of ash soil sites in North and South Racehorse pasture, seven miles or more northeast, where Malheur Valley fiddleneck (*Amsinckia carinata*) is found, additional ash soils seven or more miles northeast and also seven or more miles south where biennial stanleya (*Stanleya confertifolia*) is found, and rocky outcrops seven or more miles south where golden buckwheat (*Eriogonum chrysops*) is found. These habitats are not present near the proposed fence site.

3.3 Noxious Weeds

Scotch thistle (*Onopordum acanthium*), an aggressive biennial, dominates a small acreage at a number of locations within the Harper Allotment, especially adjacent to roads and other areas of previous disturbance. Whitetop or hoary cress (*Cardaria spp.*), another perennial noxious weed is also present, especially adjacent to roads and other routes of seed distribution. Medusahead (*Taeniatherum caput_medusae*), an aggressive annual grass, is present at limited sites with clay layers present in the soil. Perennial pepperweed (*Lepidium latifolium*), an aggressive, long-lived perennial, is present adjacent to a number of streams, especially Malheur River. Russian knapweed (*Acroptilon repens*), a deep rooted long-lived perennial, occurs in limited locations. Noxious weed distribution in the allotment is more significant at lower elevation within areas of greater historic livestock impacts. Noxious weed presence is sparse in areas dominated by healthy perennial species such as those adjacent to the rims of Cottonwood Creek Canyon.

3.4 Livestock Grazing

Harper Allotment is located southwest of Harper, Oregon (figure 1), and is part of the Skull Springs Management Unit. Boundaries of the allotment are approximately defined by US highway 20 to the north, the Crowley road to the east, the source of Keeney Creek, Rufino Butte, and Tims Peak to the south, and Sperry Creek to the west.

The Harper Cooperative Agreement was implemented in 1995 which defined terms and conditions of livestock management practices implemented to protect public land resources. The 58,302 acre allotment (95% federal) is currently divided into 5 managed pastures. A number of small enclosures/exclosures are also present. Four livestock operators are authorized to graze cattle or sheep within the allotment between April 1 and October 31 annually. Palmer Ranch is authorized to graze 2224 AUMs annually with an additional 806 AUMs authorized as a result of a lease of private land belonging the Verda Palmer. Hidden Valley Ranch Partnership is authorized to graze 661 AUMs annually, while Michael and Casey Coleman are authorized to graze 1121 AUMs annually. The Cooperative Agreement grazing schedule is as follows:

Year	Pasture	Season of use
Year 1	Simmons Gulch	4/1 to 6/15
(2002, 2005, etc.)	Shearing Plant	6/16 to 6/30
	Rufino Butte	7/1 to 8/30

	Indian Camp	9/1 to 10/31
Year 2	Simmons Gulch	Rest
(2003, 2006, etc.)	Shearing Plant	4/1 to 5/15
	Rufino Butte	5/16 to 7/31
	Indian Camp	8/1 to 10/31
Year 3	Simmons Gulch	4/1 to 5/15
(2004, 2007, etc.)	Shearing Plant	Rest
	Indian Camp	5/16 to 7/31
	Rufino Butte	8/1 to 10/31

Assessment of rangeland standards and guidelines in accordance with 43 CFR 4180 is planned within the Mainstem Malheur River Geographic Management Area, including Harper Allotment, during FY 2005.

3.5 Wildlife and Fish

Harper Allotment includes year-long and summer only range for mule deer and pronghorn antelope. Elk also make limited seasonal use. Other wildlife species found in the area include neotropical migratory song birds, small mammals and reptiles.

No known wildlife species listed as threatened or endangered under the Endangered Species Act of 1973 are present within or adjacent to Harper Allotment. Bureau Sensitive, Assessment, and Tracking species which may use habitats available in Harper Allotment include western toad, feruginous hawk, loggerhead shrike, western burrowing owl, western sage grouse, pygmy rabbit, desert horned lizard, Mohave black-collared lizard, and northern sagebrush lizard. Little information is currently available on numbers and distribution of these species.

Habitats within Harper Allotment supporting sage grouse include those supporting leks, nesting and brood rearing. Sage grouse are seasonally present in a number of the pastures with three known lek sites on the plateau between Tims Peak Reservoir and the sources of the North and South Forks of Squaw Creek.

Redband/rainbow trout (*Oncorhynchus mykiss ssp*) occur in Cottonwood Creek, where pools and lower water temperatures provide some refuge through most of the year.

3.6 Recreation and Visual Resources

Dispersed outdoor recreation in and near Harper Allotment consists primarily of occasional off highway vehicle use within designated open areas and the hunting of upland birds and big game animals. Some dispersed general sightseeing occurs. The public land portion of the allotment is within visual resource management (VRM) Class I (Camp Creek Complex of Wilderness Study Areas), II (Malheur River Canyon), III and IV areas. The objective of each class is as follows:

- Class I is to preserve the existing character of the landscape. This class provides for natural
 ecological changes, and it allows limited management activity. The level of change should be
 very low and must not attract attention. Class I is assigned to those areas where a management
 decision has been made to preserve a natural landscape. This includes areas such as wilderness,
 the wild sections of Wild and Scenic Rivers, and other Congressionally and administratively
 designated areas.
- Class II is to retain the existing character of the landscape. The level of change to landscape characteristics should be low. Management activities may be seen but should not attract the attention of a casual observer. Any change must conform to the basic elements of form, line, color, and texture in the predominant natural features of the characteristic landscape.

- Class III is to partially retain the existing character of the landscape. Moderate levels of change
 are acceptable. Management activities may attract attention but should not dominate the view of a
 casual observer. Changes should conform to the basic elements of the predominant natural
 features of the characteristic landscape.
- Class IV is to provide for management activities that require major modification of the landscape.
 These management activities may dominate the view and become the focus of viewer attention.
 However, every effort should be made to minimize the impact of these projects by carefully locating activities, minimizing disturbance, and designing the projects to conform to the characteristic landscape.

3.7 Wilderness Study Areas

The Cottonwood Creek area was inventoried for wilderness values in accordance with the Federal Land Policy and Management Act of 1976. Within the Oregon Wilderness Environmental Impact Statement (December 1989), the 8,700 acre Cottonwood Creek Wilderness Study Area, in addition to the adjoining Camp Creek, Gold Creek, and Sperry Creek WSAs, were recommended suitable for designation as wilderness. Pending congressional action relative to designation or release, the area continues to be managed in accordance with the Interim Management Policy for Lands Under Wilderness Review.

3.8 Cultural Resources

Pre-European contact Native American peoples were extremely well adapted to their environment. The subsistence economy was strongly oriented toward gathering and collecting because plant foods were more abundant and dependable than fowl, fish or mammals. Mammals provided skins, furs, tools and many other by-products of aesthetic and practical value. Insects were often eaten. Beetles, grasshoppers, locusts, crickets, ants and caterpillars were consumed, as well as most eggs and larva. Historic documents indicate that several hundred plants were used by the Indians of the Great Basin for medicinal purposes, fiber sources and food. The Native people of the Great Basin, who practiced the ancestral lifeways into the 19th century were heirs to an extremely ancient cultural tradition with a technology both effective and efficient, with many multi-functional, light-weight and expendable tools.

Exploration into this area during the Historic period began with the expeditions of John Jacob Aster, after he heard the stories from the Lewis and Clark Expedition of 1804_1806. The first written observations of southeastern Oregon can be found in journals kept by men involved in the expansion of fur trapping territory. Trapping occurred along the major and minor tributaries in the area: Owyhee, Snake, Malheur, North Fork Malheur and South Fork Malheur Rivers. The era of the fur trade provided the basis for American families to travel west. For Native Americans, increased use of the Oregon Trail burdened grazing resources, killed off game, and displaced resident bands.

Prehistoric use of the area is documented by the presence of camping sites, lithic scatter sites of tool-stone and grinding stones where giant wildrye, Indian ricegrass or other native grains are present.

Cultural resource surveys conducted in adjacent areas have been limited to areas where surface disturbing projects have been proposed. The diverse geomorphology and perennial water sources provide habitat for a variety of floral and faunal species that would have been attractive to Native Americans and settlers alike.

3.9 Riparian Values

The primary management objectives to improve riparian habitat adjacent to springs and streams which were identified in the Southeastern Oregon Resource Management Plan, was to achieve proper functioning condition, attain water quality standards, and to provide suitable habitat for desirable terrestrial and aquatic species. Water developments, fencing, and implementation of appropriate livestock grazing schedules are expected to result in a more even distribution of livestock into upland vegetation communities, with fewer animals around perennial streams and resulting in improved water quality. No wetlands other than riparian

communities associated with streams, springs, and constructed reservoirs are present within Harper Allotment.

A number of authors have summarized the impacts of seasons and intensities of livestock use of riparian vegetation (USDI-BLM 1997, USDI-BLM 2000, USDI-BLM 2001). Many have cautioned against midsummer livestock use when the narrow ribbon of riparian vegetation is more preferred than dried upland forage, riparian shade is more abundant than in upland communities, and available water is more readily available. As a result livestock tend to concentrate in riparian communities when they are available midsummer.

3.10 Areas of Critical Environmental Concern

Lake Ridge Area of Critical Environmental Concern/Research Natural Area (ACEC/RNA), located on the plateau of Simmons Gulch Pasture adjacent to Tims Peak and the source of the North and South Forks of Squaw Creek, was designated within the SEORMP based on its representation of the low sagebrush/bluebunch wheatgrass and low sagebrush/Idaho fescue vegetation cells identified by the Oregon Natural Heritage Program. Additionally, sage grouse, which frequent the area, and several leks have been identified as relevant and important values.

Neither the proposed action nor the no action alternative is anticipated to affect this ACEC/RNA positively or negatively, due to its location relatively distant from riparian resources associated with Cottonwood Creek and the condition of vegetation resources for which the ACEC/RNA was designated. No further analysis of impacts to the ACEC/RNA will be completed.

3.11 Climate/Topography

Harper Allotment is composed of rolling hills and steep talus slopes where the elevation above sea level ranges from approximately 2600 feet at the north allotment boundary adjacent to Malheur River to 5200 feet elevation near Tims Peak. Rims which form the boundary between Rufino Butte and lake Ridge pastures are near 4300 feet elevation. Semi desert shrub steppe vegetation communities result from cold winters and hot dry summers. The long term average annual precipitation is between ten and twelve inches, dependent on elevation, aspect, and typical storm tracks. Precipitation occurs primarily as snow fall during the winter with occasional mid-summer thunder storms. Climate and topography would not be affected by the proposed action or the no action alternative. No further analysis of climate or topography will be completed.

3.12 Other Mandatory Elements

The following mandatory elements are either not present or would not be affected by the proposed action or alternatives:

- Air Quality
- Water Quality
- Native American Religious Concerns
- Wild and Scenic Rivers
- Hazardous Wastes
- Prime or Unique Farmlands
- Wetlands/Flood Plains
- Environmental Justice
- Actions to Expedite Energy-Related Projects (Executive Order No. 13212 of May 18, 2001)

4 Environmental Consequences

This chapter is organized by alternatives to illustrate the differences between the proposed action and the no action alternatives.

4.1 Proposed Action Alternative

Consequences of implementing the proposed alternative; construction of approximately 0.4 miles of permanent fence to enhance the barrier to livestock movement between Rufino Butte and Lake Ridge pastures, would result in the following anticipated consequences.

4.1.1 Vegetation, Soils and Watershed

Proposed fence construction to exclude movement of livestock from Rufino Butte Pasture to riparian communities of Cottonwood Creek would result in limited direct impact to vegetation communities as a result of soils disturbance required to drive posts and string wire. Blading of a route for fence construction would not be allowed although some shrubs may be trimmed to allow wire passage. Impacts to vegetation resources to deliver materials to the site would be negligible, whether completed with a helicopter of packed on horses. Direct impacts to vegetation, soils and watershed values would recover short term, one to three growing season following fence construction. Cattle concentration adjacent to the new fence would increase impacts to vegetation resources short term until animals discover the newly established trail to Cottonwood Creek is no longer available. The recently developed cattle trail to Cottonwood Creek would recover short term as cattle traffic is eliminated.

Long term impacts to soils and watershed values within upland vegetation communities would be minimally changed from those which have occurred in recent years, as analyzed in Appendix R of the SEORMP, since neither the season nor the intensity of livestock use would be changed. Mid-summer impacts to riparian vegetation communities adjacent to Cottonwood Creek caused by unauthorized livestock movement from Rufino Butte Pasture would be reduced as the integrity of established grazing schedules is restored.

4.1.2 Special Status Plants

Special status plant species would not be affected by the proposed actions. Timely field inventories of areas surrounding the sites of proposed fence construction would be completed prior to the initiation of work to ensure that special status or habitat would not be impacted. The project layout would be modified as appropriate to avoid impacts to any special status species plants or habitats found or the project would be terminated if impacts could not be mitigated.

4.1.3 Noxious Weeds

Ground disturbance and dispersal of noxious weeds and undesirable species is anticipated to be little changed with proposed fence construction. Minimal foot and horse traffic with associated ground disturbance during construction and maintenance of the fence would slightly increase risk for dispersal of weed seed and other undesirable plant materials along roads and routes of access as well as the area of project construction, providing sites for new weed establishment. The anticipated increase in noxious weed presence or dominance due to fence construction is small with limited cumulative consequences when added to existing threats. Introduction of weed species by horses used during construction would be insignificant when added to existing livestock and livestock management actions. The need for periodic surveys and treatment of sites invaded by noxious weed species would be relatively unchanged.

4.1.4 Livestock Grazing

Established levels of livestock grazing use authorized within Harper Allotment would be supported with the construction of the proposed fence. Grazing schedules for Harper and Red Hills would be maintained by reestablishing perceived barriers to livestock movement between Rufino Butte and Lake Ridge pastures.

4.1.5 Wildlife and Fish

Negative impacts to wildlife would be minimal as a result of constructing the proposed fence. The potential for wildlife entanglement in additional fences would be increased, although adjacent rims which provide some barrier to livestock movement would continue to allow passage by many wildlife species. Continued improvement of riparian habitats adjacent to Cottonwood Creek, resulting from maintaining the integrity of established grazing schedules and exclusion of mid-summer livestock use, would benefit wildlife and fishes.

Sage grouse have complex life histories and often require large home ranges to survive. Other than the location of leks, there is little information in BLM files concerning sage grouse habitat use in this allotment. Proposed construction of a short fence is not anticipated to affect habitat quality negatively or positively other than mid-summer exclusion of livestock from riparian vegetation communities may improve associated meadow communities and their habitat quality. Fences can increase accidental injury and death should sage grouse fly into them when approaching or leaving riparian communities.

4.1.6 Recreation and Visual Resources

Recreation values would be little changed by the proposed construction of 0.4 miles of gap fencing. Visual impacts resulting from the proposed actions would be consistent with the management objectives for VRM Class I by preserving the existing character of the landscape. The activity to construct and maintain the proposed 0.4 miles of fence would be limited. Change from the current situation would be very low and not attract additional attention when added to a number of existing gap fences providing the barrier to livestock movement between pastures. Visual impacts from disturbance of vegetation and soil resources would be minimally changed from existing conditions on public lands within the WSA as a result of fence construction and would recover rapidly with the following growing season.

4.1.7 Wilderness Study Areas

In accordance with IMP, new permanent livestock developments may be approved if they truly enhance wilderness values and satisfy the nonimpairment criteria. Surface disturbance created by construction and maintenance of approximately 0.4 miles of permanent fence would be very minimal and be outweighed by potential riparian resource recovery adjacent to Cottonwood Creek through ensured implementation of established grazing schedules. Enhanced riparian resources contribute to Camp Creek Complex WSA's wilderness values. It would be required that all posts be colored similar to the natural surroundings and not have light colored tops to ensure the proposed fence is substantially unnoticeable. Brace structures would be also required to be colored similar to the surrounding vegetation and geology and not create significantly noticed unnatural lines. The natural ecological condition of vegetation would be maintained, visual conditions of the lands and waters would not be impaired, changes to the numbers or natural diversity of fish and wildlife would be enhanced, and other wilderness values would be maintained with implementation of the proposed fence construction, primarily as a result of protecting riparian resources as planned in the established grazing schedules.

In the event of wilderness designation, this permanent fence could be easily and immediately removed in the event it is found to not be consistent with designation.

4.1.8 Cultural Resources

Cultural resources would not be affected by the proposed actions. A Class III cultural resource survey of the area of the proposed fence construction would be completed. Mitigation for any cultural or historic sites located would be completed by rerouting the proposed fence or other accepted methods.

4.1.9 Riparian Values

As identified above, riparian resources adjacent to Cottonwood Creek are scheduled to be protected from mid-summer impacts from livestock concentration by implementation of a grazing schedule allowing spring and early summer use only. Construction of the proposed 0.4 miles of gap fencing would better ensure that the established grazing schedule is implemented and mid-summer impacts by livestock are avoided. Implementation of the existing grazing schedule would continue improvement of Cottonwood Creek riparian resources documented in recent years, especially those improvements which have occurred since implementation of the current schedule in 1995.

4.2 No Action Alternative

Consequences of implementing the no action alternative, retention of existing barriers to livestock movement between Rufino Butte and Lake Ridge pastures and enforcement of terms and conditions of grazing permits requiring compliance with the established grazing schedules, would result as summarized in the following sections.

4.2.1 Vegetation, Soils and Watersheds

The no action alternative would affect vegetation, soil, and watershed resources in no ways other than are currently occurring. Some livestock trailing would continue into Cottonwood Creek from Rufino Butte Pasture and would likely increase with time as the trail becomes more established. Although upland management objectives identified in the land use plan would continue to be met, localized impacts to riparian vegetation adjacent to Cottonwood Creek would continue with mid-summer livestock use during the periods of unauthorized livestock movement into Cottonwood Creek, detection of cattle presence, and herding of cattle back to areas where use is authorized.

4.2.2 Special Status Plants

The no action alternative would likely have no effect on special status plants since no known habitats supporting identified species are present in the vicinity of trails between Rufino Butte Pasture and Cottonwood Creek.

4.2.3 Noxious Weeds

The no action alternative would not change noxious weed distribution or dominance in ways other than those currently occurring. Localized soil disturbance and existing vectors of distribution of noxious weed plant material, including those associated with livestock grazing, would continue. The need for continued surveys and localized treatment would continue.

4.2.4 Livestock Grazing

Livestock management in Harper Allotment would continue as defined in the 1994 Harper Allotment Cooperative Agreement and terms and conditions of grazing permits with implementation of the no action alternative. No change in levels or seasons of livestock use would occur in the short-term. Livestock operators would be required to increase livestock management activities to ensure compliance with those

terms and conditions, especially to avoid and/or correct unauthorized livestock movement from Rufino Butte Pasture to Cottonwood Creek during mid-summer.

4.2.5 Wildlife and Fish

Wildlife habitat values would remain unchanged with no additional direct impacts to wildlife species. Potential wildlife and fish habit benefits from continued riparian improvement associated with removal of livestock impacts during mid-summer adjacent to Cottonwood Creek would not be realized. Potential adverse impacts to big game and sage grouse caused by additional fencing would be avoided.

4.2.6 Recreation and Visual Resources

The no action alternative would retain current recreation opportunities and visual resources quality. Impacts to riparian wildlife and fish habitat caused by incidental livestock presence mid-summer would result in indirect impacts to recreation opportunities for hunting and other dispersed recreation.

4.2.7 Wilderness Study Areas

Although wilderness values within Camp Creek Complex WSA's would be retained within those identified during inventory with grandfathered grazing use, opportunities for riparian improvement addressed with the 1994 Harper Allotment Cooperative Agreement would not be realized so long as incidental mid-summer use by cattle continues.

4.2.8 Cultural Resources

The no action alternative would not affect cultural resources in ways other than are currently occurring. Existing direct impacts to cultural resources from livestock concentration would continue at the current level.

4.2.9 Riparian Values

Mid-summer unauthorized grazing and livestock impacts adjacent to Cottonwood Creek would continue to limit the rate of recovery of riparian communities planned within the 1994 Harper Allotment Cooperative Agreement. Incidental livestock impacts to stream banks and channels would continue to impair water quality and associated values of healthy riparian vegetation communities. Potential impacts to riparian values from mid-summer livestock use are summarized in Appendix R of the SEORMP.

5 Adverse Effects

Unavoidable adverse effects from implementation of the proposed or no action alternative are limited to those impacts to soils, vegetation and riparian function described in the text above. Economic impacts are limited to funds necessary to construct and maintain the proposed fence or those resources necessary to increase livestock management activities in the continued absence of an effective barrier to control livestock movement toward Cottonwood Creek.

6 Short Term and Long Term Impacts

Short-term impacts to vegetation resources during construction of permanent fencing to preclude livestock trailing to riparian communities would be offset by long-term benefits to riparian resources including water quality and timing of discharge, wildlife habitat, and watershed stability associated with improved riparian function. No short-term or long-term change of grazing use and subsequent impact to local or regional economies is anticipated as a result of the proposed action or no action alternatives.

7 Irreversible or Irretrievable Commitment of Resources

In the event that implementation of the proposed actions are found to not meet current land use plan objectives, objectives identified in the SEORMP, or Standards for Rangeland Health and Guidelines for Livestock Grazing, existing grazing schedules or revised grazing schedules could be implemented with no irreversible or irretrievable loss of resources. Similarly, should the proposed fence not function as expected to enhance the barrier to livestock movement, should it have unforeseen negative impacts, or should it be found to not be compatible with objectives in the event of wilderness designation, it could be removed or redesigned with no irreversible or irretrievable commitment of resources.

8 Mitigating Measures

Based on BLM staff input, the following mitigating actions would be implemented to minimize undesired negative impacts of implementing the proposed action:

- No mechanized equipment would be allowed within wilderness study areas. Fence materials, tools and labor would be transported to the site by helicopter, horseback, or on foot.
- To maintain the proposed fence as substantially unnoticeable, it would be required that all posts be
 colored similar to the natural surroundings and not have light colored tops. Brace structures
 would also be required to be colored similar to the surrounding vegetation and geology and not
 create significantly noticed unnatural lines.

9 List of Preparers

Steve Christensen Rangeland Management Specialist
Bob Alward Outdoor Recreation Planner, Wilderness

Jean Findley Botanist
Diane Pritchard Archaeologist

Shaney Rockefeller Hydrologist/Soil Specialist

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Cynthia Tait Fisheries Biologist
Lynne Silva Range Technician, Weeds

Jon Freeman Realty Specialist

Tom Hilken Planning and Environmental Coordinator Tom Dabbs Field Manager, Malheur Resource Area

9.1 List of Agencies, Organizations, and Persons to Whom Copies of the EA are Made Available

Livestock operators; Harper and Red Hills allotments

Hal Shepherd, Northwest Environmental Defense Center

Jon Marvel, Western Watersheds Oregon Natural Desert Association

Oregon Natural Resources Council

Sierra Club, Oregon Chapter, High Desert Wilderness Committee

Joseph Higgins, Wilderness Watch, Pacific Northwest Office

Stuart Garrett, High Desert Chapter, Native Plant Society of Oregon

Audubon Society of Portland

Doug Heiken, Oregon Natural Resources Council

Mary Scurlock, Pacific River Council

Katie Fite, Committee for Idaho's High Desert

High Desert Wilderness Committee

Greeley Trust

Mark McKenzie

Sam McKenzie

Duncan McKenzie
Mary Ellen Allison
Bill Barnett, Owyhee Outback Ranch
John and Lisa Davis
Larry and Kay Davis
Walt Van Dyke, Oregon Department of Fish and Wildlife
Dean Adams, Tribal Chairperson, Burns Paiute Tribe
Gary Burke, Tribal Chairperson, Confederated Tribes of the Umatilla Reservation
Russ Hursh, Malheur County Court

A file search completed October 30, 2003, identified no additional requests by members of the public to be considered an interested public for Harper Allotment or for actions proposed within Wilderness Study Areas.

9.2 Literature Cited

USDI-BLM. 1997. Grazing Management for Riparian-Wetland Areas. U.S. Bureau of Land Management Technical Reference 1737-14. Denver, Colorado. 63 p.

USDI-BLM. 2000. Proposed Southeastern Oregon Resource Management Plan and Final Environmental Impact Statement (April 2001). U.S. Bureau of Land Management, Vale District, Oregon. 3 v.

USDI-BLM 2001. A Guide to Managing, Restoring, and Conserving Springs in the Western United States. Technical Reference 1737-17. U.S. Bureau of Land Management. Denver, Colorado. 70p.

USDI-BLM 2001. Biological Soil Crusts: Ecology and Management. U.S. Bureau of Land Management Technical Reference 1730-2. Denver, Colorado. 110 p.

